under the NREP during 1989-90, 1990-91, 1991-92, 1992-93 and 1993-94;

(b) the targets set for 1994-95; and

(c) the steps taken to achieve the targets?

THE MINISTER OF STATE IN THE MINISTRY OF RURAL DEVELOPMENT (DEPARTMENT OF RURAL DEVELOPMENT) (SHRI RAMESHWAR THAKUR): (a) The National Rural Employment Programme (NREP) was discontinued in 1989-90. It was merged alongwith the Rural Landless Employment Guarantee Programme (RLEGP) into Jawahar Rozgar Yojana (JRY) w.e.f. 1.4.1989. The State-wise details of employment generation targets fixed and the achievements made under JRY during 1989-90 to 1993-94 are given in Annexure. (See Appendix 172 Annexure No. 33)

(b) The employment generation targets fixed under JRY for 1994-95 are given in Annexure. (See Appendix 172 Annexure No. 33)

(c) For achievement of tagets fixed under JRY, its implementation is monitored regularly at the Central, State, District as well as at the Village Panchayat level.

Committee on earthquake predictions

1477. SHRI GOVINDRAO ADIK: Will the PRIME MINISTER be pleased to state:

(a) what is the Composition and terms of reference of the expert committee set up by Government in 1987 on earthquake predictions;

(b) whether the Committee has submitted its report to Government;

(c) if so, the details of the recommendations made; and

(d) whether the recommendations have been accepted by Government. If not, the reasons therefor?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE AND MINISTER OF STATE IN THE DEPARTMENTS OF ATOMIC ENERGY, SPACE AND IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI BHUVNESH CHATURVEDI): (a) to (d) The Department of Science and Technology had set up a Committee of Experts in 1986 to formulate a comprehensive 5-10 year profile for seismological studies in India.

Composition: Prof, A. S. Arya, Department of Earthquake Engineering, University of Roorkee, Roorkee—Chairman; (ii) Major General G. C. Agarwal, Surveyor General, Survey of India, Dehradun: (iii) Dr. H. N. Srivastava, Director (Seismology), India Meteorology Department, New Delhi; (iv) Dr. H. K. Gupta, Director, Centre for Earth Sciences Studies, Trivendrum; (v) Shri F. L. Narula, Director, Land Slides and Seimotectonics Division Lucknow (for GSI, Calcutta) and (vi) Dr. G. D. Gupta, Sr. Scientific Officer, DST, New Delhi.

Terms of Reference: The terms of reference sought the guidance of the Committee on (i) measures for strengthening the observational network in the country; (ii) suitable measures for improving the design codes and construction practices, (iii) identification of programmes and methods for organising disaster preparedness; (iv) organisational linkages; and (v) programmes for manpower development.

The Committee submitted its report to DST in 1987. Major recommendations include: (i) Continued support and strengthening of earthquake studies at various institutions; (ii) Setting up two regional centres; (iii) Setting up of an Earthquake Advisory Council and National Earthquake Information Service.

DST is taking follow-up action in phases. The Himalayan Seismicity programme evolved by DST has been strengthed by addition of new observatories and strong motion arrays. At present the system consists of 38 observatories in the North-West Himalaya and more than 150 strong motion accelerographs. These instruments have generated some unique data sets in the last few years. The seismological activities in IMD have also been enlarged. A computerised data base has been set up. A major proposal for seismological instrumentation upgradation in the peninsular shield has recently been framed for which the World Bank has indicated its support. An International Advisory Committee has been constituted to oversee the execution of this project.

Research in food production

1478. SHRI JAGMOHAN: Will the PRIME MINISTER be pleased to state:

(a) what research work has been done or is being done by the Department of Biotechnology to achieve a quantum jump in food production in India in view of the emerging demands, and

(b) whether Government propose to make more investment in this Department to strengthen it and to enhance is poestial for achieveving a breakthrough in biotechnology in the matter of food production?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE AND THE MINISTER OF STATE IN THE DEPARTMENTS OF ATOMIC ENERGY, SPACE AND MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI BHUVNESH CHATURVEDI): (a) The Department of Biotechnology has supported R and D projects in the areas of crop biotechnology, biofertilizers, biological pest control, embryo transfer technology and aquaculture. Major crops like rice, wheat, rape-seed and mustard, chickpea and other pulses have been taken up for genetic improvement. Promoting high yielding selections in mustard, and of kesari dal with very low amount of neurotoxin are in advance stages of field trials. Methods for introducing single gences into some of these crops have been standardized. In horticultural crops such as banana, and strawherry, tissue cultured planting material is available commercially. The use of biopesticides and biofertilizers are being promoted. Embryo transfer technology for herd improvement in cows and buffalc have been standardized. Over five hundred calves have been produced using this technique. This would help in rapid genetic improvement for milk and meat production. Demonstrations for semi-intensive prawn and carp cultures have shown productivity levels of over 15 tonnes per hectare per annum.

(b) Depending upon the availability of funds, the Government would like to invest in high tech biotechnology programmes to increase food production and to prevent post-harvest losses. Under a New Task Force on Food Biotechnology projects for producing value added products, mushroom cultivation and food colourants have also been initiated. These research efforts aim at enhancing the food production using the biotechnological tools.

Schemes to contain Brain Drain

1479. SHRI VIREN J. SHAH:
SHRI IQBAL SINGH:

Will the PRIME MINISTER be pleased to state;

(a) what has been the annual outgo of scientists, engineers, medical personnel and technologists during each of the last five years;

(b) what are the reasons for this brain drain;

(c) whether any study has been conducted to estimate the economic loss to the ciuntry because of this brain drain; if so, what are the results of suc a study; and

(d) what are the details of the efforts made and schemes launched by Government to attract Indian scientists who